

Application No.: 10/524,439
Atty. Docket No.: P70412US0

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A pane ~~(1)~~ for a combat vehicle or vessel which is transparent to radiation used for a purpose of its own, ~~preferably visible light, and which comprises on its outer face (8)~~ comprising a first layer ~~(20)~~, on an outer face of said pane with which the pane is adapted to reflect a ~~the~~ major part of a first electromagnetic radiation emitted by an enemy, and to reduce the pane's emittance of a second electromagnetic radiation received by the enemy, and ~~characterised in that the pane also comprises a second layer (21, 22) which is arranged on the first layer, said (20), with which second layer absorbing said second radiation so as to increase the pane's emittance of the second radiation, a thickness of said second layer being chosen~~ the pane is adapted to increase said emittance of the second electromagnetic radiation to such an extent that a difference in intensity between the second electromagnetic radiation received by the enemy from the pane and the intensity received by said enemy from the parts of the combat vessel which adjoin the pane, ~~becomes~~ is so small that the pane essentially cannot be distinguished in an image of the combat vessel

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generated ~~by~~ from said second electromagnetic radiation, said second layer at the same time ~~and to~~ essentially maintain maintaining the pane's capability of reflecting the first radiation.

2. (Currently Amended) A The pane as claimed in claim 1, ~~characterised in that wherein~~ the first layer ~~(20)~~ comprises includes an electrically conductive material and is arranged to reflect radar beams, ~~and that the~~ said second layer ~~(21, 22)~~ comprises including at least one predetermined material and ~~is~~ being arranged to increase, by means of the kind of ~~material of~~ said material, the emittance of the pane within at least part of the IR light range 2-20 μm .

3. (Currently Amended) A The pane as claimed in claim 2, ~~characterised in that wherein~~ the predetermined material is a first material capable of increasing the emittance of the pane in the IR light range 3-5 μm , ~~and that the~~ said first material ~~is~~ being included in a first coating ~~(21)~~, which is arranged directly or by the intermediary of some other coating on the first layer ~~(20)~~.

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4. (Currently Amended) A The pane as claimed in claim 3, ~~characterised in that~~ wherein the first material is near stoichiometric.

5. (Currently Amended) A The pane as claimed in claim 3, ~~characterised in that~~ wherein the first material ~~comprises~~ includes a metal oxide with relatively low electrical resistance, ~~such as certain materials of the kinds:~~ selected from the group consisting of titanium oxide, zirconium oxide, hafnium oxide, magnesium oxide ~~or~~ and tin oxide.

6. (Currently Amended) A The pane as claimed in claim 5, ~~characterised in that~~ wherein the tin oxide is a tin dioxide (SnO_2).

7. (Currently Amended) A The pane as claimed in claim 3, ~~characterised in that~~ wherein the first coating ~~(21)~~ has a thickness of 0.3-0.8 μm , ~~preferably about 0.5 μm .~~

8. (Currently Amended) A The pane as claimed in claim 2, ~~characterised in that~~ wherein the predetermined material is a second material capable of increasing the emittance of the pane

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in the IR light range 7-14 μm , ~~and that the~~ said second material ~~is being~~ included in a second coating ~~(22)~~, which is arranged directly or by the intermediary of some other coating on the first layer ~~(20)~~.

9. (Currently Amended): A The pane as claimed in claim 8, ~~characterised in that~~ wherein the second material is of the a type that has residual beam properties.

10. (Currently Amended) A The pane as claimed in claim 8, ~~characterised in that~~ wherein the second material ~~comprises~~ includes a ceramic, ~~such as certain materials of the kinds~~ selected from the group consisting of silicon oxide, ~~for instance~~ quartz, beryllium oxide, beryllium silicate, silicon carbide, sialon, cubic boron nitride and silicon nitride.

11. (Currently Amended) A The pane as claimed in claim 10, ~~characterised in that~~ wherein the silicon nitride is an oxidised silicon nitride (SiO_xN_y).

12. (Currently Amended) A The pane as claimed in claim 8, ~~characterised in that~~ wherein the second coating ~~(22)~~ has a thickness of 0.5-1.5 μm , ~~preferably about 1.0 μm .~~

13. (Currently Amended) A The pane as claimed in claim 1, ~~characterised in that~~ wherein the pane is antireflex coated.

14. (Currently Amended) A The pane as claimed in claim 13, ~~characterised in that~~ wherein the pane ~~comprises~~ includes a first antireflex coating arranged on the second layer ~~(21, 22)~~ and a second antireflex coating arranged on the inner face ~~(9)~~ of the pane.

15. (Currently Amended) A The pane as claimed in claim 14, ~~characterised in that~~ wherein the first and second antireflex coatings consist of magnesium fluoride (MgF).

16. (Currently Amended) A The pane as claimed in claim 13, ~~characterised in that~~ wherein the pane ~~comprises~~ includes an antireflex coating, ~~consisting of~~ having four partial layers[[,]] of alternately titanium dioxide (TiO_2) and magnesium fluoride (MgF), arranged on the second layer ~~(21, 22)~~.

17. (New) A pane for a combat vehicle or vessel which is transparent to visible light, comprising:

a first layer with which the pane is adapted to reflect a major part of a first electromagnetic radiation emitted by an enemy, and to reduce the pane's emittance of a second electromagnetic radiation received by the enemy; and

a second layer made of a material that absorbs said second radiation so as to increase the pane's emittance of the second radiation and with a thickness of said material such that said emittance of the second electromagnetic radiation is increased to a degree that an intensity of second electromagnetic radiation received by the enemy from the pane is substantially equal to an intensity of second electromagnetic radiation received by said enemy from parts of the combat vessel which adjoin the pane so that the pane is essentially indistinguishable from said adjoining parts in an image of the combat vessel generated from said second electromagnetic radiation, said second layer at the same time essentially maintaining the pane's capability of reflecting the first radiation.

18. (New) The pane as claimed in claim 17, wherein the first layer includes an electrically conductive material and is

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arranged to reflect radar beams, said second layer including at least one predetermined material and being arranged to increase, by means of the kind of said material, the emittance of the pane within at least part of the IR light range 2-20 μm .

19. (New) The pane as claimed in claim 18, wherein the predetermined material is a first material capable of increasing the emittance of the pane in the IR light range 3-5 μm , said first material being included in a first coating which is arranged directly or by the intermediary of some other coating on the first layer.

20. (New) The pane as claimed in claim 19, wherein the first coating has a thickness of 0.3-0.8 μm .